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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,041	06/04/2002	Chun-Chih Yang	VIAP0040USA	9772
27765	7590	02/17/2006	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION			SHARON, AYAL I	
P.O. BOX 506			ART UNIT	
MERRIFIELD, VA 22116			PAPER NUMBER	

2123

DATE MAILED: 02/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/064,041	YANG, CHUN-CHIH	
	Examiner	Art Unit	
	Ayal I. Sharon	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/5/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Introduction

1. Claims 1-10 of U.S. Application 10/064,041 originally filed on 6/4/2002, are currently pending. The application claims foreign priority to Taiwanese application 090117751, filed on 7/20/2001.

Information Disclosure Statement

2. The IDS filed on 12/5/2005 has been considered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The prior art used for these rejections is as follows:
 - a. Van De Vanter, U.S. Patent 5,813,019. ("**Van De Vanter**").
 - b. Vaidyanathan et al., U.S. Patent 6,502,233. ("**Vaidyanathan**").
 - c. Qualis Design Corp., "Verilog HDL Quick Reference Card." © 1995.
("**Qualis_Verilog**").

- d. Qualis Design Corp., "VHDL Quick Reference Card." © 1995.
("Qualis_VHDL").
5. The claim rejections are hereby summarized for Applicant's convenience. The detailed rejections follow.
6. **Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van De Vanter in view of Vaidyanathan and further in view of Qualis_Verilog and Qualis_VHDL.**
7. In regards to Claim 1, Van De Vanter teaches the following limitations, but for software files as opposed to hardware description files:
1. *A method for converting a text file into a circuit design database and vice versa so that a user can update the text file and the corresponding circuit design database; the method comprising:*
- compiling a hardware description written in the text file into the corresponding circuit design database;*
- (See Van De Vanter, especially: col.3, lines 9-20;
and col.3, line 60 to col.4, line 41; and col.28, line 32 to col.30, line 64)
- converting comment text written in the text file into a code stream according to a predetermined conversion rule;*
- (See Van De Vanter, especially: col.3, lines 9-20;
and col.3, line 60 to col.4, line 41; and col.28, line 32 to col.30, line 64)
- updating the circuit design database and compiling the updated circuit design database into the corresponding hardware description; and*
- (See Van De Vanter, especially: col.3, lines 9-20;
and col.3, line 60 to col.4, line 41; and col.28, line 32 to col.30, line 64)
- converting the code stream into the comment text, and inserting the comment text into the hardware description corresponding to the updated circuit design database so as to generate an updated text file.*

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(See Van De Vanter, especially: col.3, lines 9-20;
and col.3, line 60 to col.4, line 41; and col.28, line 32 to col.30, line 64)

However, while Van De Vanter teaches these limitations for software files, Van De Vanter does not expressly teach that these files are stored in a database.

Vaidyanathan, on the other hand, expressly teaches that "computer programs are typically composed of many different source code files and programming libraries." (See col.1, lines 33-36). Vaidyanathan also teaches the use of a database 225, and "one or more pre-created databases" that "contain information that seldom changes, such as operating system declaration and header files ..." (See col.6, lines 47-61, and col.7, lines 9-15). Examiner interprets that these libraries / databases correspond to the claimed "database".

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Van De Vanter with those of Vaidyanathan, because both teach the use of parsing of tokens to find desirable information (see col.6, lines 15-30).

Van De Vanter also does not expressly teach that the above limitations apply to hardware description files. (Van De Vanter only expressly teaches that these limitations apply to software files).

Qualis_Verilog and Qualis_VHDL, on the other hand, expressly teach that the hardware description languages VHDL and Verilog both have lexical elements called comments (see section 9 of each reference), and that comments have unique comment beginning delimiters ("/" in Verilog, and "- " in VHDL), similar to those used in software languages ("/*" in C, and "/" in C++). Van De

Vanter expressly teaches that the Comment Processor (see col.28, lines 32-47) uses the delimiter to separate the comments from regular program statements.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Van De Vanter with those of Qualis_Verilog and Qualis_VHDL, because VHDL and Verilog are programming languages with comment delimiters that enable them to be used with the Van De Vanter invention.

8. In regards to Claim 2, Van De Vanter teaches the following limitations:

2.The method of claim 1 wherein a format of the comment text is different from a format of the code stream after being converted according to the predetermined conversion rule.

(See Van De Vanter, especially: col.3, lines 9-20;
and col.3, line 60 to col.4, line 41; and col.28, line 32 to col.30, line 64)

9. In regards to Claim 3, Van De Vanter teaches the following limitations:

3.The method of claim 1 wherein the text file conforms to a specification of a Verilog hardware description language.

This claim is rejected on the same grounds as claim 1.

10. In regards to Claim 4, Van De Vanter teaches the following limitations:

4.The method of claim 3 further comprising applying an electronic design aided tool (EDA) to compile the hardware description into the corresponding circuit design database, and updating the circuit design database through the electronic design aided tool.

(See Van De Vanter, especially: col.3, lines 9-20;
and col.3, line 60 to col.4, line 41; and col.28, line 32 to col.30, line 64)

11. In regards to Claim 5, Van De Vanter teaches the following limitations:

5.The method of claim 1 wherein the code stream comprises space codes, tab codes, or enter codes.

(See Van De Vanter, especially:
see definition of "Separator" at col.6, lines 30-39
and definition of "Token Gap" at col.6, lines 58-62)

12. In regards to Claim 6, Van De Vanter teaches the following limitations:

*6. The method of claim 1 further comprising:
generating a header attached before the code stream for indicating a
starting point of the code stream.*

(See Van De Vanter, especially:
see definition of "Insertion point" at col.5, lines 59-64)

13. In regards to Claim 7, Van De Vanter teaches the following limitations:

*7. The method of claim 6 wherein the header comprises space
codes, tab codes, or enter codes.*

(See Van De Vanter, especially:
see definition of "Separator" at col.6, lines 30-39
and definition of "Token Gap" at col.6, lines 58-62)

14. In regards to Claim 8, Van De Vanter teaches the following limitations:

*8. The method of claim 1 wherein the code stream is stored in a data
container.*

(See Van De Vanter, especially: col.7, lines 11-32)

15. In regards to Claim 9, Van De Vanter teaches the following limitations:

9. The method of claim 8 wherein the data container is stored in a memo.

(See Van De Vanter, especially: col.7, lines 11-32)

16. In regards to Claim 10, Van De Vanter teaches the following limitations:

*10. The method of claim 8 wherein the data container is stored in a hard
disk drive.*

(See Van De Vanter, especially: col.7, lines 11-32)

Response to Amendment

Re: Information Disclosure Statement

17. Applicant still has not corrected the problem regarding the IDS filed 3/14/2003.

The objection has therefore been maintained.

Re: Claim Rejections - 35 USC § 101

18. Applicant has amended the claims to overcome the 35 USC § 101 rejections.

19. Examiner notes that this amendment has broadened the scope of the claims, as argued by Applicant on p.4 of the amendment: "The method is not restricted to being performed merely as a computer algorithm, and can be implemented in numerous forms of tangible items such as a computer memory or a computer system."

Re: Claim Rejections - 35 USC § 102

20. Applicant's arguments regarding the Brodie reference (see pp.5-6 of Applicant's amendment filed 12/5/05) are persuasive. Examiner has withdrawn all 35 USC § 102 rejections based on the Brodie reference.

21. New prior art rejections have been applied, in light of Applicant's amendments to the claims.

Re: Claim Rejections - 35 USC § 103

22. Applicant's arguments regarding the Brodie reference (see pp.5-6 of Applicant's amendment filed 12/5/05) are persuasive. Examiner has withdrawn all 35 USC § 103 rejections based on the Brodie reference.

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23. New prior art rejections have been applied, in light of Applicant's amendments to the claims.

Conclusion

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ayal I. Sharon whose telephone number is (571) 272-3714. The examiner can normally be reached on Monday through Thursday, and the first Friday of a biweek, 8:30 am – 5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached at (571) 272-3749.

Any response to this office action should be faxed to (571) 273- 8300, or mailed to:


USPTO
P.O. Box 1450
Alexandria, VA 22313-1450

or hand carried to:

USPTO
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center 2100 Receptionist, whose telephone number is (571) 272-2100.

Ayal I. Sharon
Art Unit 2123
February 10, 2006


Paul L. Rodriguez 2/14/06
Primary Examiner
Art Unit 2125